



OREGON TUALATIN VALLEY

APRIL 1984

AMATEUR RADIO CLUB

Po Box 5132 Beaverton, Oregon 97006



EDITOR: AL BERG WB7SIC

Membership: 229

CIRCULATION 250

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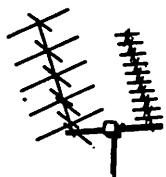
MEETING: 2nd WEDNESDAY BEAVERTON ELKS AT 7:00 p.m. (Dinner at 6:30 p.m.)

MEETING PROGRAM: COMPLETE PROGRAM DETAILS CAN BE FOUND ON THE BACK PAGE.

OREGON STATE HAM CONVENTION

The title is not altogether correct, as many of you know. When NB7W gave the editor a large selection of block titles he didn't anticipate a need for adding "ARRL Northwestern Division Convention". John, you are forgiven. Anyway, not much has been seen in the 'letter' about the convention other than the small push to fill the club motel and there have been good reasons for that. Now that registration forms are completed and all of the committees have had at least one meeting, we can start our in-club publicity campaign. Some of you newer members may wonder why we need to do this. ?? In 1982 AND 1983, club preregistrations numbered in the mid 70s. Taking into consideration that the primary convention committees number about 35 and the security people who sign up for duty total another 35, that just about takes care of the the preregistration figure. Now I ask you, when a club questionnaire is sent out and it shows that the OREGON STATE CONVENTION ranks second only to field day in club activity interest and our average membership has numbered around 220, what are the other 150 members doing? Or better put, thinking! The Clark County and Hoodview Clubs more than match our own preregistration figures and if that isn't embarrassing to you, it certainly is to your convention committee people. In this 'letter' you will discover a PREREGISTRATION FORM and we hope that you will send it in ASAP. No self addressed stamped etc. on this one. It is up to you!! If you wish to perpetuate the convention, have any pride in YOUR club and appreciate the HUNDREDS OF HOURS spent by fellow members in making this event the most well attended and respected in the northwest, please show it by preregistering. On a sweeter note, Tra La, the heavy part of the BIG SHOW is in good shape!! The seminar schedule is bulging to the point that we will use the Landmark Motor Inns conference room to handle the overflow. All of the neat PRIZES have been carefully selected and we might add that they are MUCH improved over last year. Last year at this time we had 10 booths up for grabs. As of now we are FULL. It will mean doubling up (ctd.)

of some of the free club booths and finding space we have not previously used. There is a heavy influx of booth requests a few weeks prior to the convention so plans are being made to ensure that there are a minimum of turndowns. For your information as well as that of the clubs that we swap newsletters with, there will be NO FCC TESTING at the convention. We are not sure why our local office will not comply and as the self testing plan is several months away from completion, we are at a loss! For now, there will be NO testing. If governmental processes speed up, which is doubted, this may change but don't count on it! Our banquet speaker, Roy Neal, is assured and will be comfortably ensconced in one of the local high rise condos. Mr. Neal is a highly regarded speaker with the amateur fraternity and has done his thing at uncountable events such as ours. You may be sure you will not fall asleep during his presentation!! Last but not the least, we need more volunteers for security duty. All else is (secure) but we need help in filling the biggest committee duty we have. There will be a sign-up sheet at all of the meetings prior to the convention. If you know that you will be present at the convention and have an idea on which day, sign up for a stint. It is not binding so if you have a change of plans, no big deal. Being on the floor as security is not any different than just being there to look at all the goodies. All you do is keep your eyes open. I'm signing up for 23 hours. How about YOU for three or four??? Thanks, from WB7SIC..... (and your convention committees)



"SPECIAL" Convention Guest

Lance Collister, WA1JXN, the first ham to make a contact with the STS-9 spacecraft, will be our guest at the convention. He will be giving us a seminar on 'Moon Bounce' and the real kicker is that he will be presented his W5LFL QSL card at the banquet. News releases have been sent out to QST, Worldradio and 73 magazine. This is quite a scoop for us and will go far in letting more people know about our convention. After our 1983 event, a number of people wondered how we could top it next year. Well, we have and if you don't believe it, check out the registration form and the confirmed dealers, manufacturers and etc. shown below. CU in SEASIDE!

● Important Reminder! The next FCC administered Amateur Radio examinations are scheduled for the period May 7 through May 11, 1984, but your application (FCC Form 610) must be received by the appropriate FCC Field Office by April 15th! FCC examinations are now given by appointment only. Applications can be obtained from the various FCC Field Offices.

EXHIBITORS CONFIRMED AS OF MARCH, 21.

ABC Communications	AEA	Antronics of Oregon
C-Comm	Curlys Engraving	Kantronics
Kenwood	Larsen Electronics	Marion Doolittle Antennas
Multi-Band Antennas	Nova Earth Stations	Oregon Ham Sales
Pro-Comm Consoles	Portland Radio	Tele-Comm
ICOM (99% confirmed)	Yaesu (99%)	ARRG
AMSAT	ARES	BS Typographics
Linn-Benton Rptr Group	Nthwest Rptr Group	OTVARC
Portland ARC	QCWA	Willamette Valley DX Club
10-10 City of Roses	Wood Call Plaques	FREE-2m test booth

We are working on getting a couple of computer concerns to attend and if we get them, the center will be full. Full, meaning a 25% increase over the number of exhibits in 1983. In the past, late April and early May brings us a number of 'late' requests for space. This year there will be a few no's. As mentioned above, some of the free club booths may have to be doubled up or denied space. We sure hope not but paid exhibitors are a priority item. What about next year? The new high-rise Shilo (Inn?) will be open. Perhaps the banquet may be held there and enable us to increase the exhibit space. Sure hope so. 73/88...

Zap your NiCd batteries to life

When an old NiCd wouldn't accept another charge, you used to throw it away. Now, you can bring these "dead" batteries back to life.

by Herb Friedman

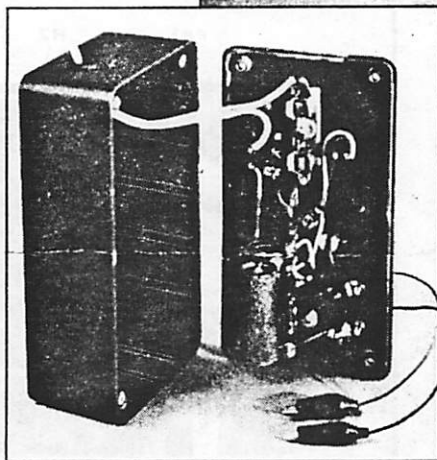
Though NiCd cells and batteries are capable of being recharged hundreds of times, many "die" before they are recharged even 100 times; some even go bad before 50 recharges.

In most instances, a NiCd goes "dead" because of an internal short, yet the NiCd can be resurrected from the dead with a relatively heavy surge of direct current that "burns" away the short. Once the short is removed, the NiCd can be recharged in the usual way.

Some tough cases—NiCds that have been "dead" for many months or those with several internal shorts—require repeated high-current surges before the short(s) opens. But eventually, even the toughest NiCd will "open up" for recharging. Naturally, if the NiCd has "died" from natural causes and is simply "used up," it can't be restored.

PM's NiCd NuLife, which can be assembled from components available from Radio Shack or most electronic-parts distributors, is an easy-to-build device for restoring NiCds. Note that the NuLife is powered directly by the 120-volt powerline. It should be assembled in a plastic cabinet, and except for the binding posts, no metal component that can be touched by the user should be connected to any part of the circuit. This includes the mounting screws for power switch S1 and the terminal strip. Make certain there is no connection to the terminal-strip lug that also serves as the strip's mounting foot.

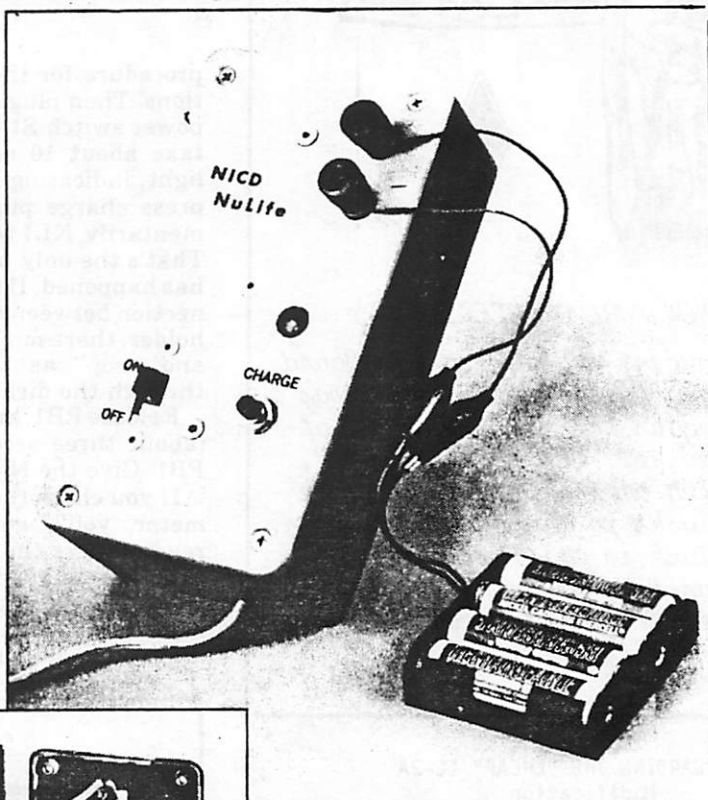
The unit is assembled in a Radio Shack plastic Project Case, measuring approximately 6 × 3 × 2 inches.



If you cannot obtain a double-pole, single-throw (d.p.s.t.) switch for power switch S1, use a double-pole, double-throw (d.p.d.t.) type and use only the connections on one side.

Lamp NL1, the "charge indicator," is a 120-volt neon lamp assembly that consists of a neon lamp and an internal resistor in a single housing. Any of the 120-volt variety sold by Radio Shack and Calctro can be used—use the least expensive one. Do not, under any circumstances, substitute just an NE-2 neon lamp (without the resistor): It will blow out almost instantly when you apply power. NL1 must be a 120-volt neon-lamp assembly; the "120-volt" means an internal current-limiting resistor is built into the assembly.

Use any Silicon Controlled Rectifier (SCR) similar to the one specified in the parts list. Just make certain the one you use is not designated "high-gate sensitivity": The project requires an ordinary, inexpensive, general-replacement SCR. The SCR's leads must be extended to fit



NiCd battery rejuvenator, which we've named the NiCd NuLife, is shown (above) hooked up to zap four AA-size cells. A press of the charge button will bring to life even old, "dead" cells. The wiring on the case front panel (left) is quick and simple.

the terminal-strip's lug spacing. Tack-solder about 3 inches of insulated wire to each SCR lead and then slip a short length of insulation tubing down the wire and over the SCR leads. If you have used shrinkable-tubing insulation, heat it with a match so it shrinks tightly over the leads.

The only special component you'll need is capacitor C1. If you plan to restore only single-cell NiCds—such as the AA, C and D sizes—C1 can be 20 microfarads (mfd.). If you intend to restore multicell NiCds, use 40 mfd. A 20-mfd./150-v. capacitor is a common size, so if you need a 40-mfd. capacitor and can't locate one, connect two 20-mfd. capacitors in parallel, as we did in our own unit, shown in the component-side photo, page 64. (Radio Shack doesn't stock C1, but it is available in the Calctro parts line. If you don't have a Calctro distributor in your area, try a local TV-service shop.

Operation

The AA, C and D NiCds are most easily handled by mounting them in an inexpensive cell holder. Connect an insulated clip lead from the battery's positive terminal to the NuLife's positive terminal; repeat this



NEW ARRL OFFICERS

At a recent ARRL Executive Board meeting, Larry Price, W4RA, was elected as the new President of the League. Carl Smith, W0BWJ, has been acting President since Vic Clarks passing last November. Much luck to Mr. Price in his new position as leader of the League. There are some very big shoes to fill.....

NOTES REGARDING THE "CHEAP" IC-2A Modification

Last month in the newsletter, Bryce Rumery, AL7DL told of the possible modification in the ICOM IC-2A hand held that will allow the user to see when his radio was receiving or not. The modification eats up very little power and is very handy at times, especially during late night bunny hunts in Corvallis. However, there is something wrong with the mod that should be corrected.

Modifying the hand held is an easy task. Mr. Rumery suggests that you place a 1.8K Ohm resistor between pin three of the IC#2 (the audio amp) and the anode of the "Send/Battery" light. This will turn the LED on when the radio is receiving, but it will also turn the audio amp on while transmitting!! The resistor provides a current path back to the IC that will bias up the audio amplifier. Oh, sure there's nothing to hear when you're transmitting so what the hay?? Not really. If you experiment with different values of resistance, you will see different intensities show up. (Ohms Law: the higher the resistance, the lower the intensity). When transmitting, the speaker will start to make very low frequency clicks. This is the audio amplifier trying to turn on. Depending on what value resistor, the amplifier may turn on, it may not, or it may just click on you. There is an easy way to prevent this. Place a standard switching diode, such as a 1N914 or whatever in series with the current limiting resistor. Place the cathode towards the anode of the LED. This will prevent the audio amplifier from seeing any stray voltage while the radio is transmitting. Be sure to remember that the diode has a 0.7 Volt drop through it, so you will need to use a slightly lower value resistor. I have a 2.2 K Ohm in my radio and it works fine. From all the radios I have modified, the 2.2K or 1.8K with the diode in series works well.

Roger D. Hayward, KA7EXM, OSU, Corvallis

ZAP NiCd BATTERIES TO LIFE

procedure for the negative connections. Then plug in the unit and set power switch S1 ON. Initially, it will take about 10 seconds for NL1 to light, indicating C1 is charged. Depress charge pushbutton PB1 momentarily. NL1 will go out instantly. That's the only indication anything has happened. If there is a dirty connection between the battery and the holder, there might be a small spark and "pop" as the current burns through the dirt.

Release PB1, and when NL1 lights (about three seconds), again press PB1. Give the NiCd a few surges.

If you check the NiCd with a voltmeter, you'll get an insignificant reading (less than .1 v.) which indicates the cell is ready for charging. If there is no meter movement, connect the NiCd to the NuLife and give it 5 to 10 more surges.

Don't handle any connecting lead, the battery or a binding post if NL1 is ON. To "close down," or remove a NiCd, set S1 to OFF and then press PM1. When NL1 goes out, the connections can be handled. The circuit is designed so that even without a NiCd connected, pressing PB1 will discharge C1 (extinguishing NL1).

Recharge your batteries normally. If they hold a charge, all is okay. If not, try the NuLife one more time before throwing in the towel. **FM**

PARTS LIST—NiCd NULIFE

BP1, BP2—binding posts (Radio Shack 274-661 or equivalent)

C1—20-mfd. electrolytic capacitor, 150 v.d.c. (see text)

D1—1N4003 silicon rectifier (or equivalent)

F1—0.25-amp. fuse, type 3AG

NL1—neon-lamp assembly, 120 v.

PB1—pushbutton switch, n.o. (normally open)

PL1—power plug with cord, 120 v.

R1—10,000- Ω (10K) resistor, 1/2 w

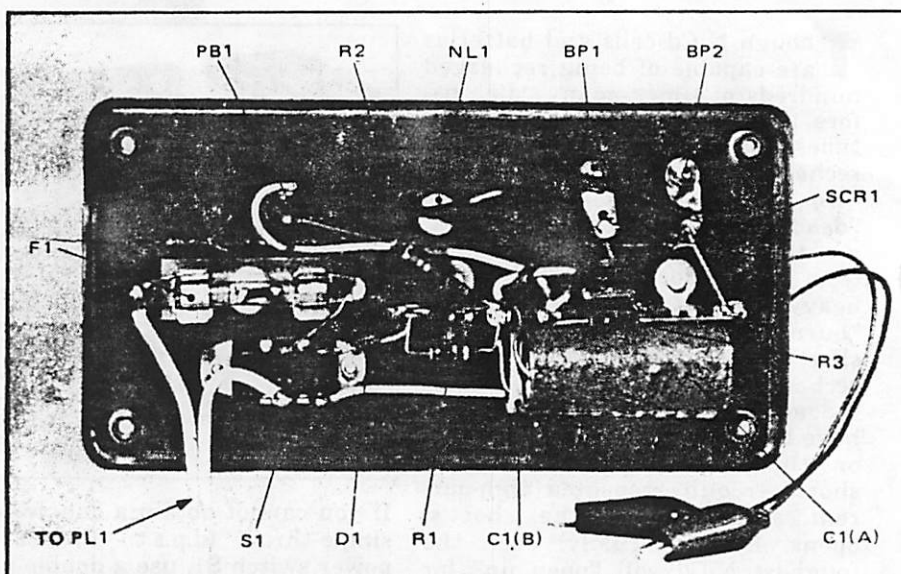
R2—4,700- Ω (4.7K) resistor, 1/2 w

R3—1,000- Ω (1K) resistor, 1/2 w

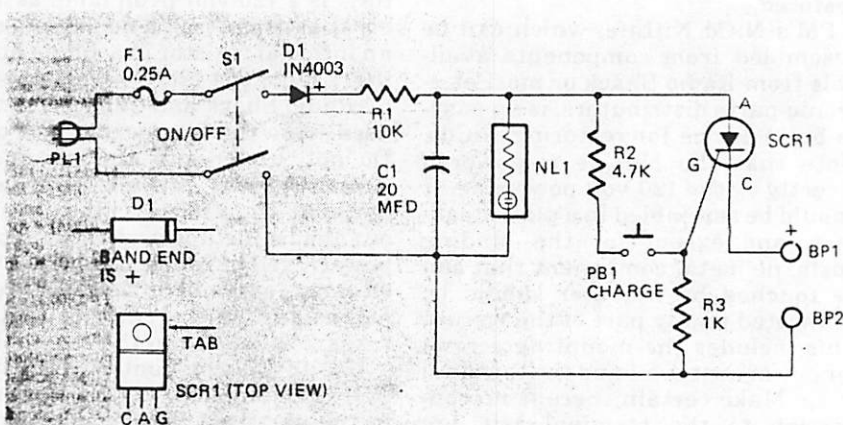
S1—d.p.s.t. switch, slide type

SCR1—200-PIV, silicon-controlled rectifier (Radio Shack 276-1067 or 276-1020 or equivalent)

Misc.: Cabinet, wire-terminal strip, press-on lettering, hardware.



The wiring of the components for the NiCd NuLife (above) is all done point-to-point on the back side of the case's top panel. See text for an explanation of C1 (A) and (B).



The schematic diagram (above) will allow you to customize your wiring to fit inside a case different from the one that's shown, since the placement of parts is not critical.

(OTVARC reprint)

A FEW WORDS FROM W7LJN



I was almost rendered speechless at the vote to adopt the bylaws and constitution as presented by the bylaw committee. There was a lot of hard work and many hours dedicated to the bylaw revisions. I wish to thank each and every participant in the revision for their efforts. The Pizza feed after the meeting was very popular and everyone there seemed to have fun. It is very difficult to walk into a group of over 100 thirsty hungry people with two pitchers of beer and decide where to set them down. When the beer and pizza finally caught up with the demand all was calm again. We all owe Terry Biggs WB7CHK thanks for a fun evening since the pizza feed was his idea. I extend sincere thanks for the donations that paid for the pizza, beer, and soft drinks. NO money came out of the club treasury, it came from many many loyal members and guests. Again thank you very much.

A new QUARTERLY meeting program series is being made possible by Portland Radio and Antronics of Oregon. The programs will feature new amateur radio related equipment. Stan of Antronics will start the series this month with the YAESU FT-757GX all mode HF transceiver and the FT-726R V/UHF All Mode Tribander. There will be slides of inside of the radios so that you won't have to squint from across the room. I believe this program will be of great interest most members. If you have any particular piece of equipment that you wish to be included in the future please let me know. I hope that by the time you receive this newsletter that APPLE COMPUTER will have confirmed the program for the May meeting. The program will feature the new MACINTOSH computer and all of it's capabilities.

The board of directors will meet the week before the meeting to declare the regular meeting of OTVARC to be held at the Beaverton ELKS club the second Wednesday of the month.

To see all the members at the regular meeting that had not been to a meeting for a long time was a very nice sight to behold. Speaking for the board and all the other members we hope to see you at the regular meetings in the future. I would like to fill the ELKS club meeting room to the limits before the end of this year. It is impossible to please all the members all the time but it is the policy of the present officers and board to try our best. The vote at the last meeting would tend to indicate that at least at that meeting we pleased all but ONE.

See you at the APRIL Meeting
73, W7LJN

AMATEUR RADIO GLOSSARY

FREQUENCY CONTROL: Obtained by crystal controlled oscillators, phase locked loops and by W7NI during the last DX contest. (see-Kilowatt)

HAM OPERATOR: Extraordinarily dedicated individuals who devote hours of study of electronics, mathematics, regulations and Morse Code in order to be allowed to discuss the weather over ham radio.

REPEATER: An expensive high elevation device used to repeat important information such as the weather, signal reports and "Honey I'll be home in 10 minutes." Sometimes used for emergencies if it isn't busy.

ROTATOR: A mechanical rotating device clamped at the base of a directional antenna which is used to hold it pointed in one direction.

ANTENNA PARTY ANTENNA PARTY

For those of us in OTVARC who have never experienced a tower and antenna raising party have surely missed a lot in life. KA7HJT and KA7KDB are experienced hams who are the back bone of the group. It is one of the most rewarding SATURDAY projects we could ever do. On the job training teaches one more than any book could teach you. Besides learning, it also brings OTVARC and friends to a closer knit group for a better friendship and understanding.

The next time you hear about an OTVARC antenna raising party on the repeater or elsewhere -- drop everything and run -- join it. It is a most rewarding experience which is never forgotten. KA7BSD



FT. VANCOUVER HAMFAIR 84

NEW DATE: MAY 19 - 20



Clip and Mail

Ft. Vancouver Hamfair
Registration Chairman
11206 N.E. 232 Ave.
Vancouver, WA 98662

CLIP AND MAIL BY MAY 4 FOR EXTRA TICKETS

MAKE CHECK PAYABLE TO
CLARK COUNTY AMATEUR RADIO CLUB

() Yes, I am coming to the FORT VANCOUVER HAMFAIR. I enclose my check for _____

I need the following:

- () Registrations @ \$5.00 () Check if EARLY BIRD EXTRA.
() Adults Dinner @ \$5.50
() Kid's Dinner (12 or under) \$2.50

Each registration will be confirmed by mail. Ask for your ticket packet at the registration booth on arrival.

Name (please print) _____ Call _____

Address _____

City _____ State _____ Zip _____ Phone _____



This is an ARRL
sanctioned meet.

FT. VANCOUVER HAMFAIR 84

NEW DATE: MAY 19 - 20

GRAND PRIZE ICOM 745

TALK IN STATIONS ON: 147.84/24



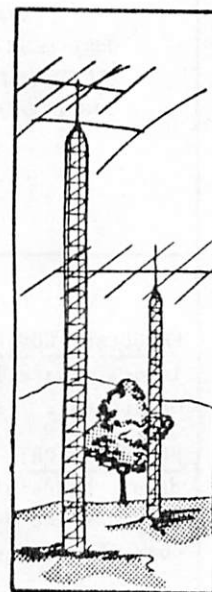
Courtesy: Portland Radio Supply, ICOM
and Clark County Amateur Radio Club

\$100 CERTIFICATE FOR Larsen Kūrod Antennas

Courtesy:
Larsen Antennas
Vancouver, Wash.



2 Meter Mobile 144 - 148 MHz



\$100 CERTIFICATE for ROHN 25 G TOWER COURTESY

antronics
OF OREGON, inc.

Sponsored by the Clark County Amateur Radio Club -- W7AIA -- Vancouver, Washington

CLARK COUNTY FAIRGROUNDS - 7 MILES NORTH OF VANCOUVER, WASHINGTON -- ON I-5 [take exit No. 9]



FOR SALE: Yaesu 101E. All filters, DC power cord, Astatic mic, hand mic, manual and cooling fan. \$395.00.
Yaesu YC-601 digital readout. Compatible with all 101 series txcvrs. \$125.00. AL, WB7SJC at 640-5456

FOR SALE: ICOM IC 255A, 25 watt 2m rig. \$250.00 or offer.
Two ICOM IC 280's, 10 watt. \$200.00 each or offer.
One CES mic for \$10.00. Roy, N7DXJ at 640-6535.

WANTED: Two outdoor type PA speakers. 8 ohm and plus-10 watt capability. Building a PA system for club outings.
AL, WB7SJC. 640-5456.

VISIT YOUR LOCAL RADIO STORE

Heathkit[®] ELECTRONIC CENTER

Brian Hawkins
Manager

Heathkit Electronic Center
516 SE Chkalov Dr. #1
Vancouver, WA 98664
(206) 254-4441



Heath 'Antenna' dissipates RF

We've made the original 'Antenna' even better! Now this important device has improved specifications, better components and our famous low, build-it-yourself kit price. HN-31A now handles 1 kW of RF energy (2kW PEP) with VSWRs always less than 1.5:1 for frequencies up to 450 MHz. Provides ideal 50-ohm non-inductive load to your setup, and eliminates unnecessary QRM during tune-up, maintenance or alignment. Prolongs life of your finals. Holds one gallon of transformer oil (not supplied). Should be standard in every ham shack!

Kit HN-31A, Shpg. wt. 3 lbs. 24.95

IN NORVAC ELECTRONICS



12905 S.W. Beaverdam Road
Beaverton, Oregon 97005

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HANDTOOLS
TOOL CABS
TUBING
FUSES
BATTERIES
POWER SUPPLIES
LAMPS
CHEMICALS
SOLDER SUPPLIES

SOLDER/DE-SOLDER TOOLS
BREADBOARDS
WIRE WRAP TOOLING
KEYBOARDS
SOCKETS
SPEAKERS
POTENTIOMETERS
MICROPHONES
CRYSTALS
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TECHNICAL PUBLICATIONS
TECHNICAL PERIODICALS
SOFTWARE
8100 BOARDS
OUTLET STRIPS
LINE FILTERS
CONVERTERS
ANTENNAS

MEMBERSHIP NOTICE

Effective NOW, these vacant ad spaces are available for members in business who have business cards and would like to help the club and yourself. The space is 'to let' for \$5.00. You can run on a permanent basis or whenever you like. Your card MUST be easy to photocopy! No light blue or wierd colors please. Also, no self made druggists, sauna owners or white slavers cards allowed. Our treasurer will bill you for tax purpose records. This is on a first come, first served basis...

PERSONAL COMPUTER INCOME TAX HINT...

It's tax time again and many of you use your computer for business purposes - such as developing software, keeping track of various things - or writing (such as I do.) Are you aware of the tax advantages of using a personal computer for business?

Under President Reagan's new tax code depreciation rules, you have a choice: you can immediately write off as a deduction up to \$5,000 worth of depreciable equipment bought in 1983 (\$7,500 in 1984 and 1985; and \$10,000 for 1986 and beyond) or you can depreciate a business-use computer over five years and with that comes an investment credit of 10 percent. You can get a tax savings of \$300 on a \$3,000 computer (but you reduce the depreciable basis of your computer by one half of that credit.)

If you elect this latter system, it is best that you get advice from a CPA. You can also elect to take only an 8 percent tax credit (\$240 off the top) then depreciate the entire \$3,000.

When you depreciate a computer, you may deduct the following amounts:

Year One = 15 percent of the price
Year Two = 22 percent
Years Three, Four & Five = 21 percent

Software can be depreciated, but you don't get an investment tax credit since it is an "intangible."

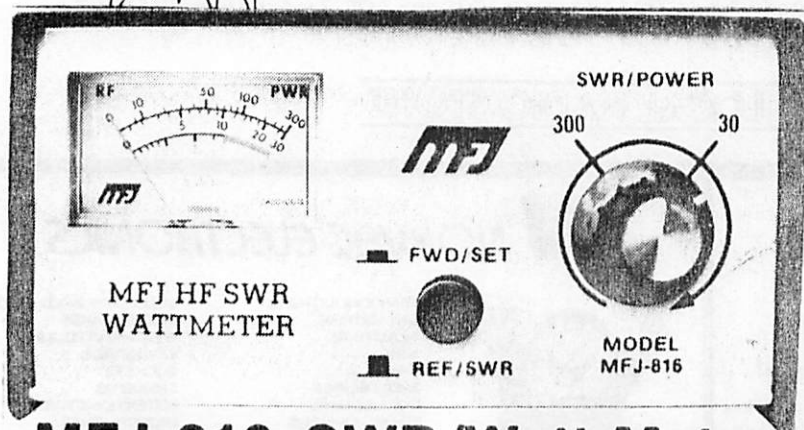
Another thing you should take into consideration. If you use your personal computer only 75% for business, then you can only take 75% of the deductions.

**This
Month's**

PORTLAND RADIO SUPPLY

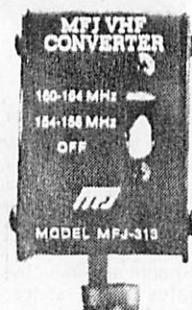
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Specials!



MFJ-816 SWR/Watt Meter
300 Watts • 1.8 - 30 MHz.
reg.: \$33.95 **SALE: \$28.95!**

**Hear Police/Fire/Weather
on 2 Meter Handhelds with this
MFJ VHF Converter!**



Scanning Handhelds
become Police/Fire
Scanners!

MFJ-313

SALE: \$39.95

(regularly: \$43.95)

Works on VHF or
UHF Handhelds!

WOW!

FLASH!!!

Kenwood TS-430 Transceiver
only \$699.95! Now to May 31!

Kenwood Day!

Kenwood Day!

Kenwood Day!

Kenwood Day!

Prizes

Coffee

KENWOOD DAY!

Punch

Coupon
Drawing

Special
Drawing

Cake

Saturday
April 21, 1984

Balloons

Hourly Gifts

Special Deals!

Kenwood Day!

Kenwood Day!

Kenwood Day!

Kenwood Day!

**DON'T
FORGET!**

PRS SERVICE SHOP....

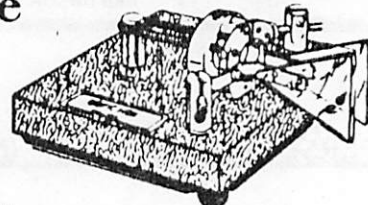
Factory trained service technician

Service with a guarantee!

**DON'T
FORGET!**

The Ultimate IAMBIC PADDLE...

- Full range of adjustment in tension and contact spacing
- Self-adjusting nylon and steel needle bearings
- Gold plated solid silver contact points
- Precision-machined, chrome plated brass frames
- Black textured heavy steel base
- Non-skid feet



BENCHER, INC.
333 W. Lake St., Chicago, IL 60606
(312) 263-1806

Iambic Paddle BY-2

Chrome Base, Gold plated contacts

Reg.: \$56.95 **SALE: \$49.95**

NEW MEMBERS

Would you believe TEN new members this month? Yep! Read on. Welcome to: Les Ferison, KD7RY--Gus Amato, KC7XB--Gerard Davis, KA7KMA--Ron Hinze, no call yet--David Mann, NB7X--Gary Lite, no call yet--George Sneed, KA7HRJ--Lynn Hurd, WB7UNU--Bryan Spooner, KA7RIG--and John Winn, KD7SN. Super nice to have you all with us and hope that you will all get involved.

NEW CALL: Katy LaPay was KA7QWJ and is now N7GCL. Nice call!



Mr. Al Berg
WB7SIC
Oregon Tualatin Valley
Amateur Radio Club
Beaverton, Oregon

March 18, 1984

Dear Mr. Berg;

In as much as Joanne and I have decided that the March (special "regular") meeting would more than likely be the last OTVARC function that we would care to attend, we felt that an explanation of our decision might be in order for you and possibly your readers.

Our concern and displeasure with OTVARC meetings really came to a head during the raffle at the March meeting. The fact that I received a few boo's upon winning the Vic 20 Computer, really didn't have as much to do with our decision as the events of the following few days.

First of all, on Thursday we went to a local computer "candy" store to pick up a memory expansion for the "Vic". You see 5K of memory just isn't much when you consider all the memory that Parker (W7LJN) has in his!!! After purchasing 16K of memory and still not having as much as Parker, and reviewing the amount that we had to pay for 16K, it became obvious that we could return the 16K board, buy a Commodore 64, sell the Vic 20, and really not be out that much extra cash! Besides, then we would be much closer to Parker's machine!

To make a long story short, we turned around and returned to the candy store, bought a Commodore 64, and then, the trouble really started. You see, Dave not only has a computer, he has a disk drive and printer!! Now, how could I go home without these very necessary additions for my new 64? You guessed it, some \$600 later, we arrived home with no less than a Commodore 64, a printer, disk drive, and a few extra goodies to make it all workable.

Al, the \$600 really isn't what has us so upset. It's the \$6 that we were forced into spending on those raffle tickets that started this whole mess. Besides that, we now have a Vic 20 sitting here in the box unopened, and don't know what to do with it!

So, you see, we just can't attend any more of your meetings.....it's too darn expensive for us to win all of those goodies!



LIGHTHEARTED LEXICON

Armor: Knight clothes

ELECTRONIC SOFTWARE DELIVERY

Be on the lookout for a new electronic software distribution method that will revolutionize the personal software industry! The system is very simple! A retail terminal connected to the phone lines downloads programs onto a blank cartridge or disk. A software package is created right on the spot! K-Mart has already test-marketed the (\$15,000 cost) Software Reproduction Station. They particularly like the "no inventory needed" feature.

Once a customer has made a selection the process is almost automatic. A store clerk simply enters the program's catalog number into a terminal and the program data is transferred to the store via a new AT&T high-capacity telephone line scheduled to be phased in this year.

Software developers like the idea since they won't have to manufacture cartridges or diskettes or guess at what the market will be at all. Computer stores, on the other hand, are violently opposed to the method which will divert sales to the mass merchandiser who will be able to sell for less! Biggest seller - at least at first - will be video game titles! There is also no reason why any needed software documentation could not be electronically delivered too. W5YI

● EAGLECREST ELECTRONIC VILLAGE is under construction in California. USC's Center for Future Research says that within 10 years, five million workers will stay at home! Each of the 360 homes at Eaglecrest will offer computer stocked "teleport" offices where their inhabitants will telecommute to their office. It is estimated that 60% of all office jobs can be done at home. Management will get "telecommuting reports" daily indicating how efficient their home workers are. Eaglecrest will offer electronic everything! Bulletin boards, home management, home entertainment, home education... even computer garage sales!

DX DX DX DX DX

You may have passed up a most unusual group of four attending the VICTORIUS Pizza Party. They are the new DX-peditionary party forming up for a trip to FOØ, CLIPPERTON ISLAND. ANY ONE NOTICE THEM????? More later. Doc, KA7BSD

● IBM, CBS and Sears have joined hands in a Videotex venture. Plans are to develop an information service to households with home computers! The system, which will be open to a wide variety of advertisers, retailers, publishers and financial services, will run on any personal computer or terminal. It will be a two-way "interactive" service allowing home shopping, bill paying, banking, news, educational programs, electronic mail and more! IBM, CBS and Sears each will add their expertise to the venture. Sears will handle the complex billing and marketing, IBM the hardware and software development and CBS will develop commercially sponsored information and entertainment. The service is just now in the planning stage. The partnership was signed early February with an agreement to make financing available as required. W5YI

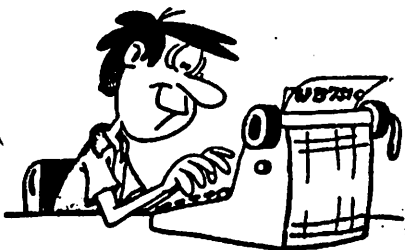
● Cordless Phones are now being made by more manufacturers than ever now that the FCC has allowed 5 new frequency channels. Market expected to reach 10 million units this year - more than double last year! The problem of overcrowding still as bad as ever and slated to get worse! CB radio all over again! And don't forget that your cordless telephone conversation is NOT private! It can easily be received by nearby scanner owners some of which really get their kicks from supposedly private telephone conversations! W5YI

● IBM said that the typical personal computer owner is a well educated male manager who is a little intimidated by computers. They gave these four steps on HOW TO CHOOSE A SMALL COMPUTER. (1.) Decide your need (business, personal finance/management, education, entertainment, whatever...) (2.) Find the software which suits that need. (3.) Let the software dictate the choice of hardware and (4.) Choose a dealer, carefully evaluating price, service, expertise and continuing support (and not necessarily in that order.) It is hard to improve on that advice!

● Look for CABLE READY TV SETS to hit the market soon complete with jacks to hook up VCRs, home computers, external (quad stereo) speakers and fancy electronic stereo tuners resembling a calculator keypad.

Secret: Something that's told to one person at a time

A FEW DJTS AND DAHS



- * Dave covered the recent regular special meeting pretty well but I just couldn't resist making a few comments of my own. We saw 112 members show up to cast their vote and that is outstanding, especially when you consider that it was a spring vacation week and many people were on trips.

The evening was a milestone for ALL of us. Not for the officers but for every member we have. It should be a giant relief to the majority in the club as this problem had been hanging over us for nearly three years and most heavily for the past two years. A super job by all of you that have helped and a very big congratulations to Terry Biggs for the pizza party idea. It was a real blast!!

- * It may interest you to know that OTVARC has grown to be the largest non-repeater club north of San Francisco and west of the Mississippi. This is to the best of our knowledge. If we receive a challenge on this statement, fine, but they (?) had better make it quick. Last month's 'letter' indicated a membership of 217. We now number 229. It is not at all impossible to expect that by the end of 1984 we will number around 280 and very likely be pushing the 300 figure. The first year of club existence saw us staying at around 35 members and then it started to grow. The last meeting we had at the now closed Sambos on 185th and Rock Creek saw a membership of 95 and the room, maximized for 60 people, sat 87 OTVARC members. Not comfortably but we made it. Not long after, while at Norths Chuckwagon, we had a meeting when the membership was 105 and over 120 people showed up. That was the night that Wes, K7WUG, got there late and had to eat his dinner standing up. Remember, Wes? Bigger is not necessarily better, as we all know, but the question behind all of this is WHY? Why has the club grown so quickly and continues to grow? Most of you know the answer to that so I won't expound on it. If you don't know why you are in one heck of a fantastic club, you soon will. More later!!

- * CLIQUES!! A very ugly word and one that is kicked around in any large group. When anyone tells me that we have cliques, and says it in a derogatory way, my comeback is to say, "You bet we got cliques. We have a whole BUNCH of cliques and we sure better keep it that way". Why else do people join a club of our kind. I see the same groups of people gathered together at a club meeting, in the bar afterwards and the groups running around together on week-ends. Many of these people never knew one another until they joined the club. What a super way to make new friends and further enjoy our hobby. If you are feeling left out, take a step forward. Shake a hand, say hello to a stranger, Sit middle row and up front. Cliques? You better believe it!

Thanks for listening. AL, WB7SJC

WAYNE GREEN SUBMITS CODE PETITION....

I asked Ray Kowalski about a Petition that was submitted by Wayne Green (W2NSD/1) relative to Morse code proficiency. "He has indeed filed a Petition which has asked for periodic code retesting every two years and also for a requirement that on every retest that you have to demonstrate a code proficiency of at least 5 words per minute faster than the last time until you reach a particular level which I believe was 30 or 35 words per minute."

I asked Kowalski if he thought this was in answer to the FCC killing the codeless amateur radio class. "I have heard that from the amateur community that this is indeed a 'sarcastic' filing. We don't place any value judgements of people's petitions. We just treat them as petitions and handle them accordingly. I have no idea at this point how the Green petition will be handled." W5YI

(Edited phone conversation with FCC's Ray Kowalski, Private Radio Bureau, 2/25/84)

(Ye Ed: Old Weenie Wayne lost all the hair on his head and it now appears that everything directly below it is going paws up as well) INCREDIBLE!!!

CABLE TV FIRMS BATTLE SIGNAL PIRATES

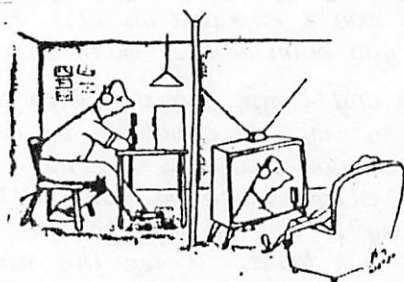
An Oregon cable TV firm lost a lawsuit last during February against 25 alleged video pirates after a federal judge ruled that the defendants were not violating the federal wiretapping statutes. Willamette Subscription Television Service had used the wiretap allegation as a major argument against a select group identified from 3600 alleged bootleg signal recipients. WST was seeking \$100 per day and a minimum of \$1000 per defendant for the violation period. W5YI



Handy IC remover

Bob Bainbridge, KA3EJT

Here is how I made a home-made tool for removing those pesky hard-to-get-out IC chips. Your wife probably has an extra pair of tweezers around the house, (how come — we're always raiding the wives' cupboards), or you can get one at any drugstore. Cover the upper parts of the tweezers with heat-shrink tubing. Then measure off ¼-inch at each tweezer end and bend in. Presto! You have your new handi-helper for removing those IC chips. IF you got the tweezers for nothing, then you can't beat the price of this handy, valuable tool.



... ORX one ... the XYL says I'm comin
in on the TV ...

A NEW 'DX' BABY!

We had a DX-pedition program a few months ago which was provided by Victor, ZK1CG. His wife presented him with a new YL called Heather on the 29th of Nov.. Marsha is the mom and she wants us to know that Vic had the easy part of providing the DX world a future YL contact in the area of Cook Island. May Heather be hale, healthy and active on all bands! Just goes to show how a tropical climate, warm breezes and palm trees affect people. Here's to many more ZK's!!!!!! Congrats to Vic & Marsha.

How to locate radio/television home interference

1. Go to your main fuse or circuit breaker panel with a battery-operated transistor radio tuned between stations and listen for the noise. (If at night or in an enclosed room, be sure to have working flashlight with you.)

2. If the noise is present and corresponds to the disturbing interference, shut off all power to your premises by opening the MAIN circuit breaker, switch or other enclosed service disconnect. Do not attempt to remove cartridge fuses or operate exposed or open-type disconnects if physical contact with the electrical circuit is at all possible.

If the noise on the battery-operated radio stops, the source of interference is within your own premises.

Restore the MAIN circuit breaker, switch or disconnect.

3. Assuming the noise stopped while your electric service was off, you can now locate the noise source.

While monitoring the transistor radio as before with the noise present, open individual sub-main circuit breakers one at a time until the noise disappears.

You must now determine what has been turned off by going from room to room, checking outlets, appliances and lights for the absence of electricity. The offending noise source will be something on this circuit.

If the noise is steady, look for a running electric motor, fluorescent lighting fixture, light dimming switch, paddle fan with a silicon controlled rectifier in the circuit, or some other radio or television equipment.

Devices most commonly found on private premises that cause intermittent radio or television interference are: heating pads, electric blanket controllers, tropical fish aquariums, refrigerators (butter conditioners), door bell transformers and/or flashing decorative lighting.

4. It is important for your own benefit to have the offending device checked and/or repaired to insure normal safe operation.

5. The interference produced by these devices will travel through the house wiring out to the power line, down to the power transformer and through the service wires to each of the houses on the transformer. Therefore, if you don't find the source of interference in your house, it may be coming from one of your neighbors. If so, be diplomatic and ask for your neighbor's help. This will be the quickest and easiest way to solve the problem and keep on friendly terms with your neighbors.

Good luck.

LIGHTHEARTED LEXICON

Counterfeit money: Homemade bread

Antenna Lore

The antenna is not only the most important part of any amateur station, but also remains the most misunderstood part.

A few years ago, M. Walter Maxwell, W2DU, delivered a withering attack on the many myths and fallacies surrounding the whole "standing wave ratio syndrome," and I remember once horrifying a "World Radio Club" panel by admitting it was (is) my normal practice to tune up HF antenna systems using neon bulbs and flashlight bulbs rather than by using an SWR meter. (Though I hasten to add I have nothing against SWR meters provided the readings are correctly interpreted!) But attacking antenna myths is always a dangerous business, often provoking vigorous counterblasts.

The latest to take the risk is T. King, ZL2AKW, (Break-in, October 1978) who has come up with 13 "basic antenna facts" (slightly modified in the version given below):

1. A dipole cut for the centre of the 3.5 MHz band, and fed with 50 or 75-ohm coaxial cable via an antenna tuner, will be just as good at the band edges as it is at the resonant frequency of the dipole element.

2. The same dipole, fed with 300-ohm ribbon or open line, again via an antenna tuner, will work on any band from 1.8 MHz to 29.7 MHz.

3. Unless higher than 150 feet, it hardly matters on 3.5 MHz in which direction dipole points: more significant will be obstructions, trees, etc. which absorb some of the power.

4. A long antenna provides more receiver microvolts than a short one (less than $y/2$), but a transmitting antenna radiates all the power that can be fed to it (except IR losses).

5. Antennas, and the equipment connected to them, can confidently be expected to provide better and better results on HF as a sunspot cycle goes up and up.

6. The result of doubling your RF power output will be virtually unnoticeable, but halving your input power may well be noticeable since output efficiency may be affected.

7. A loosely-loaded transmitter sounds awful when overdriven.

8. A tightly-loaded transmitter, when overdriven, sags at the knees and output may even be reduced.

9. A properly tuned system is when the antenna correctly loads the transmitter.

10. A poor antenna is always a poor antenna, but when conditions are good it will work.

11. There are no magic formulas or magic boxes able to improve the performance of a poor antenna, but it is easy to reduce dramatically the efficiency of a good antenna.

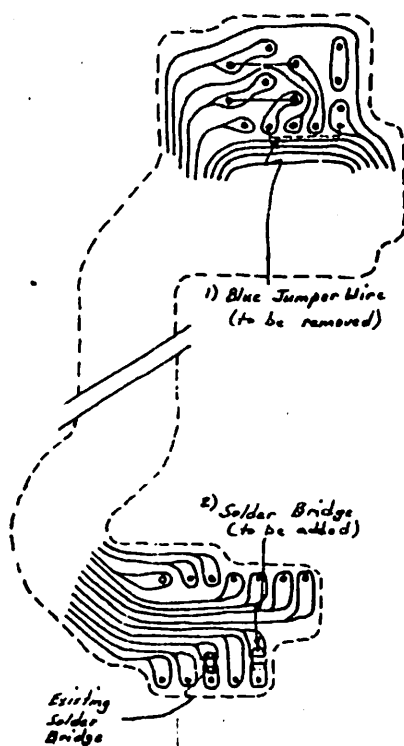
12. A bought antenna is not a better antenna, but merely a more expensive antenna; a better investment is a good book on antennas.

ANOTHER ICOM 2AT CONVERSION

As versatile as the Icom IC-2AT HT is, it has two major deficiencies as far as some hams are concerned: 1) it does not operate below 144MHz or above 148MHz, and 2) it has no provision for non-standard offsets (other than + or - 600KHz). The first objection can be eliminated with the modification to be outlined below. The second can be eliminated with the modification detailed in the July 1981 issue of "73" magazine, on pages 84 thru 88. This second modification will allow operation on any one non-standard offset. Together these mods will allow operation on the complete two meter band as well as other services such as MARS and CAP.

The first modification is very simple, requires no special tools, instruments, or additional parts and can be done in 15 minutes from start to finish (if you work slow). This modification will allow the unit to operate from 140.000MHz to 149.995MHz on receive, and on transmit typically from 141.000MHz to 149.995 simplex and somewhat more with the + and - offsets.

The diagram below is of a 'flexible' circuit board near the hinge of the two halves of the HT. Here is the procedure:



1) Find the blue jumper wire at the top end of the board (near the top of the HT) and remove it.

Article written by WD4LIM
Modification developed by
(I believe) WB9CRH.

2) Now find the foil trace at the bottom of the board which has a break, and bridge the break with a solder bridge.

THAT'S IT!!! Now close your HT.

(OTVARC reprint) Courtesy Orlando ARC & N4BOS

BOOTLEGGERS

Be on the alert for the call of KA7FAZ, a young guy who claimed to be going to school in Monmouth. Raised in Lake Oswego and recently moved here from LA. So he says! When cornered, he said that the call was his fathers. The call sign belongs to Robert Decker of Thatcher, Arizona and is listed as a novice. The kid claimed to be using a new Yaesu 208R HT and gave his name as Paul. If anyone hears him, make note of the time and frequency and let me know. A letter is being sent to the license holder informing him of the infraction. He may very well have a son by the name of Paul. If not, it's bunny hunt time!! Please call if heard: AL WB7SIC

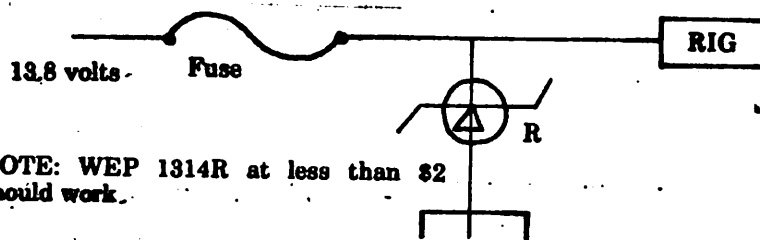
640-5456

Save your mobile rig from damage

The following item was taken from the OH-KY-IN VHF ARS - Q-Fiver. Did you ever think what might happen to that expensive rig in your car if the voltage regulator went out? Modern alternators can put out more than 35 volts if uncontrolled. This would fry most rigs, even if only applied for a few seconds. The following idea for protecting your rig was found in the Jackson, Michigan Mini-Mag. All that is needed is a 15-volt 10-watt Zener diode and fuse that you probably already have.

12-volt systems operate at around 13.8 volts and should not get much above 14 volts. The device works like this: If the voltage rises above 15 volts, the Zener fires and attempts to bring the voltage down. As it does, it draws more and more current until the fuse blows. The Zener may be destroyed, but that is a small price to pay for saving your rig.

- DARA R-F Carrier



NOTE: WEP 1314R at less than \$2 should work.

CONVENTION MOTEL CHANGE

The name of the motel is going to change so if you call the Landmark Motor Inn and get an answer of "ECONO LODGE", don't be surprised. The joint sold out to a chain based in Cal. but will retain the same mgmt.

We got the swimming pool closing time extended to 10:30 pm this year. No big improvement but a step in the right direction. The managers bedroom is 'across the wall' and that is why they are not too anxious to extend the hours!

SSSSHHHHHHHHH!!

LIGHTHEARTED LEXICON

Bore: Someone who goes right on talking when you have something to say

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- Joystick
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- Franklin BASIC manual

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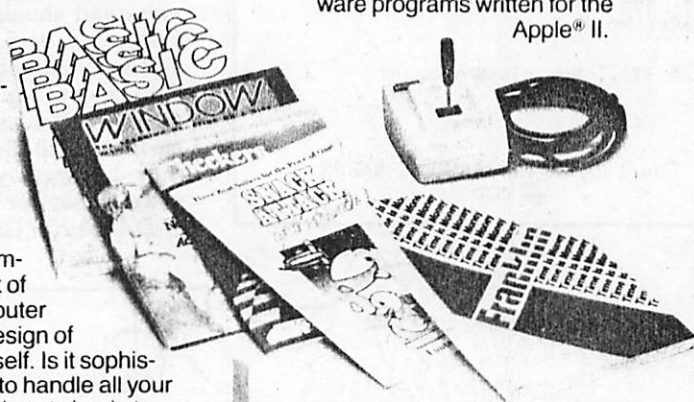
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MEETING PROGRAM



Our 'Prez' kind of took the wind out of things with his 'Few Comments' section regarding the meeting program but as many members kind of skip over some of the less important articles, I will briefly fill you in on what is coming up. Our program committee, in its infinite wisdom, decided that a NEW PRODUCT nite would be kind of neat. New products meaning ham gear and our very first program of this nature will be given by Stan, W7NI, of Antronics. He will fill us in on the fantastic new Yaesu FT-757GX HF rig. Word is that dealers can't keep the rigs in stock due to its popularity. The other item to be shown is the new Yaesu FT-726R VHF/UHF all mode ??? You see, it's so new we don't even know what it is. If you think that this program will be of a sleepy nature-WRONG! The products are quite interesting and most of you know Stans speaking

ability. Never a dull moment! Expect a highly interesting evening. You won't ask for your money back on this one. (PS) Got a sneak preview of some of the raffle items! Rest assured that if ADM wins the BIG one he won't know how to use it... We will leave this page out of ADM-QFL's 'letter' in hopes that they will stay home. Just for insurance, we are making up a special page just for them that says 'no raffle this month.'

CONVENTION



For the past four years we have had a club booth at the Clark County Ham-fair. For the past three years the club has had a booth at the Seaside convention. In all cases the same five or six people have enjoyed the duty of manning the exhibit for the club. It is GREAT fun and has helped the club and the convention to a large degree. Those five or six people would like to let some others get in on the act and find out how much fun it is. They feel that they have 'hogged' the limelight long enough and truly want to let others get involved! Now if you really want to get involved, here is your chance!

We will set up at the Clark County affair so as to advertise the CONVENTION. We set up at the CONVENTION to advertise our CLUB and to raffle off a valuable piece of ham gear. (how valuable?-- wait and see!!!) Warren Winner, W7JDT, has the responsibility of advertising for the convention so give him a call if you would like to have a great time meeting fellow hams, promoting of both the convention and the club and making a lot of eyeball contacts with calls/names. YOU make the call to volunteer! Give an hour, a day or whatever you can. Remember, first come is first served! The booths are supplied with only three chairs so if we get too many piled up, some of you may have to stand. Get in line early so as to assure a seat. Call Warren at 644-0752 PRONTO!! Be an exhibitor, a promoter, salesman and have a fun time with a great group!

WHO TO CALL FOR WHAT

*PUBLIC SERVICE	Mark Cattell	N7CRQ	245-1230
*CLUB CONTESTS	Jeff Freedman	K7JF	641-6636
*TECHNICAL	Dee Lynch	KA7NPN	646-4580
*PROJECT NIGHT	Terry Biggs	WB7CHK	648-3687
*PUBLIC RELATIONS	Randy Stinson	KZ7T	297-1175
*CLUB RAFFLE	Gino Buell	KA7KBH	646-7991
*MEETING PROGRAMS	John Haide	WA7CZA	246-8086
*CLUB SOCIALS	Paul Lucas	WB6SHR	641-8703
*EMERGENCY SERVICE	Randy Stinson	KZ7T	297-1175
*TRAINING (classes)	Bob Orr	KB7CC	297-2732
CLUB JACKETS	Warren Winner	W7JDT	644-0752
ARRG INFO	Warren Winner	W7JDT	644-0752
CLUB BADGES	Linda Cereghino	N7CZY	643-5862
ROSTER CHANGES	Linda Cereghino	N7CZY	643-5862
CLUB QSL CARDS	Dick Powers	WB7ADM	655-6498
CLUB T-SHIRTS	Dick Powers	WB7ADM	655-6498
ARRL MEMBERSHIP	John Burgess	N7DCQ	649-9095
CLUB SCRAPBOOK	Doc Miller	KA7BSD	292-8090
*CONVENTION SECURITY	Doc Miller	KA7BSD	292-8090
*CONVENTION SECURITY	Linda Cereghino	N7CZY	643-5862
NEWSLETTER	Al Berg	WB7SIC	640-5456
CONVENTION	Al Berg	WB7SIC	640-5456

* (indicates committee)

CLUB ARRL APPOINTEES

ARES District Emergency Co-Ordinator
 ARES Washington County Emergency Co-Ordinator
 ARRL Assistant Director and Club Liaison

KZ7T
 K7RXV
 WB7SIC

SEE YOU AT THE MEETING NEXT WED.
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